



## SEQUENCE LISTING

<110> Brown, Michael Paul  
Howley, Paul Michael

**<120> Poxvirus Vector Encoding Prostate Specific Antigens for Treatment of Prostate Cancer**

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caaattcgtt gcattatact aatcctttt ggtattttaa catgactata gtctataatc	3120
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agtttaccat tcgtaagaat ttggttatcg tagctcgac tttacctcta caggcaaagg	3240
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Gly Phe Leu Leu Leu Ser Leu Arg Leu Asp Pro Gly Gln Ala Lys  
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Glu Leu Lys Phe Val Thr Leu Val Phe Arg His Gly Asp Arg Gly Pro  
 35 40 45

Ile Glu Thr Phe Pro Asn Asp Pro Ile Lys Glu Ser Ser Trp Pro Gln  
 50 55 60

Gly Phe Gly Gln Leu Thr Lys Trp Gly Met Gly Gln His Tyr Glu Leu  
 65 70 75 80

Gly Ser Tyr Ile Arg Arg Arg Tyr Gly Arg Phe Leu Asn Asn Ser Tyr  
85 90 95

Lys His Asp Gln Val Tyr Ile Arg Ser Thr Asp Val Asp Arg Thr Leu  
100 105 110

Met Ser Ala Met Thr Asn Leu Ala Ala Leu Phe Pro Pro Glu Gly Ile  
115 120 125

Ser Ile Trp Asn Pro Arg Leu Leu Trp Gln Pro Ile Pro Val His Thr  
130 135 140

Val Ser Leu Ser Glu Asp Arg Leu Leu Tyr Leu Pro Phe Arg Asp Cys  
145 150 155 160

Pro Arg Phe Gln Glu Leu Lys Ser Glu Thr Leu Lys Ser Glu Glu Phe  
165 170 175

Leu Lys Arg Leu Gln Pro Tyr Lys Ser Phe Ile Asp Thr Leu Pro Ser  
180 185 190

Leu Ser Gly Phe Glu Asp Gln Asp Leu Phe Glu Ile Trp Ser Arg Leu  
195 200 205

Tyr Asp Pro Leu Tyr Cys Glu Ser Val His Asn Phe Thr Phe Arg Thr  
210 215 220

Trp Ala Thr Glu Asp Ala Met Thr Lys Leu Lys Glu Leu Ser Glu Leu  
225 230 235 240

Ser Leu Leu Ser Leu Tyr Gly Ile His Lys Gln Lys Glu Lys Ser Arg  
245 250 255

Leu Gln Gly Gly Val Leu Val Asn Glu Ile Leu Lys Asn Met Lys Leu  
260 265 270

Ala Thr Gln Pro Gln Lys Ala Arg Lys Leu Ile Met Tyr Ser Ala Tyr  
275 280 285

Asp Thr Thr Val Ser Gly Leu Gln Met Ala Leu Glu Leu Tyr Asn Gly  
290 295 300

Leu Leu Pro Pro Tyr Ala Ser Cys His Ile Met Glu Leu Tyr Gln Asp  
305 310 315 320

Asn Gly Gly Thr Phe Val Glu Met Tyr Tyr Arg Asn Glu Thr Gln Asn  
325 330 335

Glu Pro Tyr Pro Leu Thr Leu Pro Gly Cys Thr His Ser Cys Pro Leu  
340 345 350

Glu Lys Phe Ala Glu Leu Leu Asp Pro Val Ile Pro Gln Asp Trp Ala  
355 360 365

Thr Glu Cys Met Gly Thr Ser Asn His Gln Ala Ser Leu  
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Met Arg Ala Ala Pro Leu Leu Ala Arg Ala Ala Ser Leu Ser Leu  
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Gly Phe Leu Phe Leu Leu Phe Phe Trp Leu Asp Arg Ser Val Leu Ala  
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Lys Glu Leu Lys Phe Val Thr Leu Val Phe Arg His Gly Asp Arg Ser  
35 40 45

Pro Ile Asp Thr Phe Pro Thr Asp Pro Ile Lys Glu Ser Ser Trp Pro  
50 55 60

Gln Gly Phe Gly Gln Leu Thr Gln Leu Gly Met Glu Gln His Tyr Glu  
65 70 75 80

Leu Gly Glu Tyr Ile Arg Lys Arg Tyr Arg Lys Phe Leu Asn Glu Ser  
85 90 95

Tyr Lys His Glu Gln Val Tyr Ile Arg Ser Thr Asp Val Asp Arg Thr  
100 105 110

Leu Met Ser Ala Met Thr Asn Leu Ala Ala Leu Phe Pro Pro Glu Gly  
115 120 125

Val Ser Ile Trp Asn Pro Ile Leu Leu Trp Gln Pro Ile Pro Val His  
130 135 140

Thr Val Pro Leu Ser Glu Asp Gln Leu Leu Tyr Leu Pro Phe Arg Asn  
145 150 155 160

Cys Pro Arg Phe Gln Glu Leu Glu Ser Glu Thr Leu Lys Ser Glu Glu  
165 170 175

Phe Gln Lys Arg Leu His Pro Tyr Lys Asp Phe Ile Ala Thr Leu Gly  
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180

185

190

Lys Leu Ser Gly Leu His Gly Gln Asp Leu Phe Gly Ile Trp Ser Lys  
195 200 205

Val Tyr Asp Pro Leu Tyr Cys Glu Ser Val His Asn Phe Thr Leu Pro  
210 215 220

Ser Trp Ala Thr Glu Asp Thr Met Thr Lys Leu Arg Glu Leu Ser Glu  
225 230 235 240

Leu Ser Leu Leu Ser Leu Tyr Gly Ile His Lys Gln Lys Glu Lys Ser  
245 250 255

Arg Leu Gln Gly Gly Val Leu Val Asn Glu Ile Leu Asn His Met Lys  
260 265 270

Arg Ala Thr Gln Ile Pro Ser Tyr Lys Lys Leu Ile Met Tyr Ser Ala  
275 280 285

His Asp Thr Thr Val Ser Gly Leu Gln Met Ala Leu Asp Val Tyr Asn  
290 295 300

Gly Leu Leu Pro Pro Tyr Ala Ser Cys His Leu Thr Glu Leu Tyr Phe  
305 310 315 320

Glu Lys Gly Glu Tyr Phe Val Glu Met Tyr Tyr Arg Asn Glu Thr Gln  
325 330 335

His Glu Pro Tyr Pro Leu Met Leu Pro Gly Cys Ser Pro Ser Cys Pro  
340 345 350

Leu Glu Arg Phe Ala Glu Leu Val Gly Pro Val Ile Pro Gln Asp Trp  
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Ser Thr Glu Cys Met Thr Thr Asn Ser His Gln Gly Thr Glu Asp Ser  
370 375 380

Thr Asp  
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Val Thr Asn Ser Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Lys Lys  
20 25 30

Thr Gln Leu Gln Leu Glu His Leu Leu Leu Asp Leu Gln Met Ile Leu  
35 40 45

Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr  
50 55 60

Phe Lys Phe Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys Gln Leu Gln  
65 70 75 80

Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala  
85 90 95

Gln Ser Lys Asn Phe His Leu Arg Pro Arg Asp Leu Ile Ser Asn Ile  
100 105 110

Asn Val Ile Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe Met Cys  
115 120 125

Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val Glu Phe Leu Asn Arg Trp  
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Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr Leu Thr  
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